

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

1. (Currently Amended) A fish based food product comprising [[two materials,]] a texturization aerated paste material and an extrusion-cooked fibrous material, the fibrous material including individual fibres or bundles of fibres with a diameter in a range of 1 μ m to 1 mm, the product presenting a heterogeneous texture and a firm and elastic overall consistency similar to that of fish or crustacean muscle tissue, wherein the fibrous material forms a network of macroscopic fibres whose diameters are on [[in]] an order of 0.1 mm to 1 mm, and forms a ~~ramified~~-structure with microscopic fibres with diameters on an order of 1 μ m to 0.1 mm, at least some of which have a ramified network configuration.

2. (Currently Amended) Fish based food product comprising a [[two materials,]] texturization aerated paste material and a fibrous material, the fibrous material including individual fibres or bundles of fibres, with each fibre having a diameter in a range of 1 μ m to 1 mm, the product presenting a heterogeneous texture and a firm and elastic overall consistency similar to that of fish or crustacean muscle tissue, ~~wherein the fibrous material consists of small fibres with a diameter of 0.1 mm to 1 mm, the small~~ at least some of the fibres being obtained by size reduction of a fish based preparation, or originating from natural fibres of marine products resulting from

mechanical separation of myotomes, at least some of the fibres having a ramified configuration.

3. (Currently Amended) Product according to claim 1 wherein the product contains over 30% of fish meat and 25 to 40% water[[, in two- or three-dimensional shapes]].

4. (Currently Amended) Product according to claim 3 wherein [[the]] final shapes of the produce are 1 to 12 cm in length and weigh between 3 and 300 g.

5. (Previously Presented) Fish based food product according to claim 1, the paste material consisting of over 30% of fish meat, wherein the product is in the form of fish steaks, fish and vegetable based cakes, filled bars, quiches, pies, thin slices, spreads, fish rillettes, fish pâté, or small ludic shapes.

6. (Currently Amended) Process for the production of a product with a heterogeneous texture according to claim 1 wherein the process is comprised of the following steps:

- manufacturing a fibrous material and paste material;
- mixing the fibrous material with the paste material; and
- moulding the mixture to form shapes.

7. (Currently Amended) Process according to claim 6 wherein paste material is textured using homogenization, emulsification, and/or expansion and/or cutting before mixing with the fibrous material, at a rate of 0.5 part to 1 part air per 1 part of paste material, in order to obtain a gelling strength on ~~[[an]]~~ the order of 50 to 150 g/ cm², or after mixing with the fibrous material by adding between 0.3 and 1 part air per mixture part.

8. (Currently Amended) Process according to claim 6 wherein the fibrous material consists of a ramified network of fibres obtained from minced fish meat by means of a high-temperature and high-moisture extrusion cooking process comprised of the following steps:

- a. introducing fish meat into a single screw extruder;
- b. transferring fish meat from one end to another end of an extruder barrel, adjusting screw configuration and temperature within the barrel such that raw material of the fish meat successively undergoes a mixing and heating step up to a temperature of about 130° C, followed by a melting step with an increase in temperature of the material to above 130° C, and an increase in pressure to between 0 and 50 bars, such that plasticization of the transferred material fish meat takes place; and
- c. extruding, at the other end of the barrel, the transferred material fish meat obtained after plasticization, through a die adapted for texturization, and shaping and cooling the transferred material fish meat such that a product with a ramified fibrous structure is obtained.

9. (Previously Presented) Process according to claim 8 wherein the extruded fibrous material is cooled in the die to a temperature of 100°C, and the process comprises an initial cooling phase in an uncooled zone in the die at the other end of the barrel, followed by a second cooling phase in a cooled zone at an outlet of the die.

10. (Currently Amended) Process according to claim 8 wherein the extruded fibrous material obtained from the die outlet is cooled in a cold shower, sliced to a desired length, then ground, with bundles of extruded fibres being cut and processed by at least one of shredding, mincing, lamination, blending, homogenisation or separation such that the extruded fibrous material can be dispersed in a fish based matrix.

11. (Previously Presented) Process according to claim 8 wherein the extruded fibrous material contains 15 to 50% of dry matter, the dry matter consisting of at least 35% of total proteins.

12. (Previously Presented) Process according to claim 11 wherein 25 to 100% of dry matter in the extruded fibrous material consists of dry matter originating from fish and/or other marine products, and the dry matter comprises marine proteins in the form of minces, fillets, pulps, or surimi extracts.

13. (Currently Amended) Process according to claim 12 wherein the dry matter in the extruded fibrous material contains functional milk proteins, the functional milk proteins being in a dried or concentrated form.

14. (Previously Presented) Process according to claim 12 wherein the extruded fibrous material also contains at least one of egg proteins in liquid or powder form, vegetable or dairy fats, concentrated or isolated vegetable proteins, vegetable flour, starches and other complex carbohydrates, food grade hydrocolloids, spices, flavouring or colouring.

15. (Previously Presented) Process according to claim 8 wherein the extruded fibrous material is used in fresh form or preserved by physical treatment.

16. (Currently Amended) Process according to claim 7 wherein the fibrous material consists of small fibres obtained from a fish based preparation, the small fibres being manufactured according to the following steps:

- mixing ingredients of the fish based preparation;
- forming the fish based preparation;
- moulding and cooking the fish based preparation to allow gelling to take place;
- cooling; and
- size reduction of the cooked fish based preparation.

17. (Previously Presented) Process according to claim 16 where in the fish based preparation used in the manufacture of the small fibres consists of over 50% washed and refined fish meat suitable for gelling, to which cryoprotectant type stabilising agents are added for freezing purposes, the fish based preparation having a moisture content below 80% and having a gel strength of 150 to 300 g/cm².

18. (Currently Amended) Process according to claim 7 wherein the fibrous material contains cooked or raw natural fibres from crab or other marine products[.]] obtained by mechanical separation treatment.

19. (Currently Amended) Process according to claim 7 wherein the paste material contains over 30% washed and refined fish meat suitable for gelling, to which cryoprotectant type stabilising agents are added for freezing purposes, and has a moisture content below 80%, and wherein the process includes enriching the paste material with gelling or thickening agents so as to obtain a gel strength of 100 to 250 g/cm prior to texturization.

20. (Currently Amended) Process according to claim 7 wherein [[a]] the level of incorporation of the fibrous material in the paste material is between 5 and 60% [[in]] by weight, depending on the desired final texture.

21. (Currently Amended) Process according to claim 7 wherein mixing takes place at a temperature in [[a]] the range of -10°C and +20°C.

22. (Previously Presented) Process according to claim 7 wherein the fibrous material mixed with the paste material consists of at least one type of fibre chosen from ramified network fibres, fine fibres and natural fibres.

23. (Cancelled)

24. (Previously Presented) Process according to claim 7 wherein the fibrous material is incorporated according to a statistical method in a blender or mixing tank.

25. (Currently Amended) Process according to claim [[7]] 8 wherein [[a]] melting of the textured paste material is regulated as a function of [[a]] the level of fats in the paste material, the paste material having [[the]] a fat level between 0 and 50%.

26. (Currently Amended) Process according to claim 7 wherein the [[paste]] mixture obtained by mixing the fibrous material and paste material undergoes the following steps:

- forming by extrusion or moulding into two- or three-dimensional shapes or into a strip;
- cooking, leading to gelling and stabilisation of the product; and
- cooling.

27. (Currently Amended) Process according to claim 26 wherein the mixture undergoes the further step of adding surface colour ~~may or may not be added to the~~

extruded or molded forms, the colour is added ~~[[to]]~~ at least one of ~~raw forms~~ before and after the cooking step, by spraying, depositing colour on the strip or extrusion of a coloured paste material.

28. (Previously Presented) Process according to claim 26 wherein the cooking step consists of a combination of a microwave cooking step and a steam cooking step, the microwave cooking providing rapid cooking to the core of the product so as to produce a sufficiently stable gel-like structure that is stable before cooling while the steam cooking leads to the surface of the product being cooked without drying it out, with the microwave cooking being carried out before or simultaneously with the steam cooking.

29. (Cancelled)

30. (Cancelled)

31. (Cancelled)

32. (Cancelled)

33. (Cancelled)

34. (Cancelled)

35. (Currently Amended) A fish based food product comprising:

a. a [[texturization aerated]] paste including added air; and

b. an extruded fibrous material including individual fibres or bundles of fibres with a cross sectional width in a range of 1 μ m to 1 mm, the fibrous material having a network of macroscopic fibres whose cross sectional widths are each between about 0.1 mm to 1 mm, the fibrous material further having a [[ramified]] structure with microscopic fibres whose cross sectional widths are each between about 1 μ m to 0.1 mm, at least some of which have a ramified configuration; and

c. the product having a substantially heterogeneous texture[; and

the product further having a firm and elastic overall consistency substantially like that of fish or crustacean muscle tissue]].

36. (New) A fish based food product comprising:

a. a paste; and

b. a fibrous material including individual fibres or bundles of fibres of differing size wherein at least some of the fibers have a repeating, ramified network configuration as viewed on a macroscopic and microscopic level, the fibrous material being mixed with the paste;

c. the product having a substantially heterogeneous texture and a formed final shape.

37. (New) The product of claim 36 wherein the paste comprises fish material and air.

38. (New) The product of claim 36 wherein the fibers are extrusion-separated and the paste is extrusion-heated.

39. (New) The product of claim 36 wherein the paste is texturized.

40. (New) The product of claim 36 wherein the fibrous material includes ultrafibres.

41. (New) The product of claim 36 wherein at least some of the fibres have a diameter between about 1 μm to 0.1 mm.